

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-2-

information, as having claimed characteristics neither disclosed nor suggested in the prior art.

Claim 1 is amended to claim that, "the conditional access information comprises data used for determining picture resolution formats." The amendment identifies that data in the copy protection information determines picture resolutions available for recording video image information, and/or reproducing recorded video information. Support for the amendment is found in the specification on page 6, lines 5-12, page 8, lines 3-15, and in other places.

Claim 10 amended to claim that, "copy protection information comprises data used for determining display formats." The amendment identifies that the display formats available for recording video image information and reproducing recording video information depends on data within the copy protection information. Support for the amendment is found in the specification on page 6, lines 5-7, page 7, lines 10-20, and in other places. Claim 10 is also amended to eliminate "on a display" to clarify the claimed subject matter.

Claim 19 is amended to claim a recording operation for recording video information where the copy protection information, "comprises information for determining the display formats available for recording said video image information." The amendment identifies that the copy protection information determines the display formats used for recording video image information. Support for the amendment is found in the specification on page 6, lines 5-12, page 8, lines 3-15, and in other places.

Dependent Claims 20, 22-23, 25, and 29 are amended to more specifically claim the "display format" claimed in Independent Claim 19. Support for the amendment is found in the specification on page 6, lines 5-12, page 8, lines 3-15, and in other places.

New Claim 30 recites a method for selecting a picture resolution format for recording video information, where the copy protection information determines the picture resolution formats available. Support for the claim is found in the specification on page 6, lines 5-12, page 8, lines 3-15, and in other places.

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-3-

New Claims 31-36 are analogous to Claims 20, 22-25, and 29 that dependent on Claim 19. Support for the new claims is found in the specification on page 6, lines 5-12, page 8, lines 3-15, and in other places.

Sets of marked up Claims and clean Claims are enclosed with this Office Action.

I. Rejection under 35 U.S.C. § 102(e) of Claims 10-14

Claims 10-14 are rejected under 35 U.S.C. § 102(e) as being unpatentable over Kanota et al., (U.S. Pat. No. 5,991,500). The Applicant disagrees with this ground of rejection. Applicant notes that the arguments cited below, in regard to Claims 10-14, were presented to the Examiner during the telephone interview where the Examiner indicated a favorable response in view of the substance of these arguments and the suggested amendment to Claim 10.

Applicant's Claim 10 provides features that are neither disclosed nor suggested by Kanota, namely:

"b) decoding said copy protection information in said received signal, wherein said copy protection information comprises data used for determining display formats available for at least one of:

- i) recording said video image information; and
- ii) reproducing said recorded video image information;

"c) adaptively selecting a display format for displaying said video image information in response to said decoded conditional access information," (emphasis added).

These features are described in Applicant's specification on page 5, lines 14-30, page 6, lines 18-29, Fig. 2, and in other places.

In particular, the Applicant notes that Kanota neither discloses nor suggests the feature of Claim 10 that claims decoded conditional access information "comprises data used for determining display formats available," for recording video image material and/or reproducing video image material. The

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-4-

Examiner, in Part E of the rejection, writes that this claimed feature of Claim 10 is to be found in the operation of copy protection detector 25, control unit 26, encoder 27, and mixer 28 in view of signals S_{subscript 1} (S1) and S_{subscript 2} (S2). Applicant disagrees with the Examiner's assertion.

Applicant in Claim 10 claims that said conditional access information comprises data, "used for determining display formats available." In contrast, the copy protection signals in S1 and S2, described in Kanota, do not have this claimed feature. The copy protection signals in Kanota have information used by copy protection detector 25 to determine:

- a) if a reproduced video signal may be copied without limitation;
- b) if a reproduced video signal may be recorded to provide but a single generation copy;
- c) if a video signal may not be copied (Kanota, column 12, lines 61-66).

None of these features in Kanota suggest or disclose that conditional access information is, "used for determining display formats," as recited in Claim 10. The features in Kanota only determine whether a video signal can be recopied to limit multigenerational copies.

The Examiner writes in part C of the rejection that the claimed, "adaptively selecting a picture format in response to said copy protection information," of Claim 10 is disclosed in Kanota. Specifically the Examiner states, "depending upon the format of the video signals (e.g., NTSC, PAL, HD, etc.), the particular line intervals in which S1 and S2 are superimposed may vary," (Kanota, column 9, lines 63-65). Applicant disagrees with the Examiner's suggestion that Kanota discloses the selection of picture formats, in view of decoded copy protection. Kanota describes as where to put signals S1 and S2 for detection by copy protection detector 14 (see Kanota, column 9, line 66 to column 19, line 2). Copy protection detector 14, does not use S1 or S2 to, "adaptively selecting a display format in response to said decoded conditional information," as claimed in Claim 1, as suggested by the Examiner. The detector uses signals S1 and S2 to determine whether serial copies can be made (see comments in regards to part E of the rejection for the functions of S1 and S2).

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-5-

For the arguments listed above, and the discussion with the Examiner during the interview, Claim 10 is believed to overcome the rejection under 35 U.S.C. § 102(e), and Applicant requests that the rejection of Claim 10 be withdrawn. Rejected dependent Claims 11-14, are considered patentable for substantially the same reasons given above for Claim 10. Applicant therefore requests that the rejection of these claims be withdrawn as well.

II. Rejection under 35 U.S.C. § 103(a) of Claims 1-8

Claims 1-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bestler et al., (U.S. Pat. No. 5,680,457), in view of Shah-Nazaroff et al., (U.S. Pat. No. 6,157,377). The Applicant disagrees with this ground of rejection. Applicant notes that the arguments cited below, in regard to Claims 1-8, were presented to the Examiner during the telephone interview where the Examiner indicated a favorable response in view of substance of these arguments and the suggested amendment to Claim 1.

Applicant's Claim 1 provides features that are neither disclosed nor suggested by Bestler or Shah-Nazaroff, alone or in combination, namely:

"b) decoding said conditional access information in said received signal, wherein said decoded conditional access information comprises data used for determining picture resolution formats available for at least one of:

- i) recording said video image information; and
- ii) reproducing said recorded video image information;
- c) adaptively selecting a picture resolution format in response to said decoded conditional access information," (emphasis added).

Support for the amendment is found in the Applicant's specification on page 6, lines 5-7, page 7, lines 10-20, and in other places.

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-6-

The Examiner, in part C of the rejection, states that Bestler, combined with Shah-Nazaroff, anticipates the claimed feature in Claim 1 of, "adaptively selecting a picture resolution format in response to said decoded conditional access information." Applicant disagrees with Examiner's assertion. Nothing in Bester or in Shah-Nazaroff discloses or suggests, alone or in combination, the cited feature of "adaptively selecting a picture resolution format in response to said decoded conditional access information." Neither of the cited references, used by the Examiner have conditional access information comprising, "data used for determining picture resolution formats available for at least one of," recording video data, and/or reproducing said recorded video data." Without this conditional access information, the operation of "adaptively selecting a picture resolution format," (as recited in Claim 1) by the recited Bester and Shah-Nazaroff combination is not possible.

Also, the Applicant notes that the Examiner uses Bestler to suggest that depending on a desired resolution, "one or more digitally compressed television signals," may be transmitted, "over a single 6 MHz television channel." This part of the Bestler reference discloses the transport capabilities for a channel of a specific bandwidth (6MHz), where the number of signals transmitted over the channel depends on the resolution of the video signal. This part of Bestler does not disclose or suggest how to use copy protection information, containing data used for "determining picture resolution formats available for," recording video data or reproducing recorded video data, as in Claim 1. Furthermore, nothing in Bestler discloses or suggests the use of copy protection information towards a recording operation where picture resolution formats are determined in view of conditional access information.

Likewise, nothing in Shah-Nazaroff discloses or suggests conditional access information used for, "determining picture resolution formats available for," recording video image information and/or reproducing the recorded video information, as claimed in part B of Claim 1. The Examiner states Shah-Nazaroff discloses that a viewer, "buying an upgrading media feature to be able to record a digital broadcast signal," where an additional part of the signal can be descrambled to make the broadcast recordable. Hence, Shah-Nazaroff

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-7-

discloses that a video signal may be descrambled via copy protection information for a recording operation; this recording operation does not consider the "picture resolutions formats available for recording operation," as in Claim 1. Furthermore, although Shah-Nazaroff discloses that a video signal may be received at a higher video resolution (col. 2, lines 21-24) that may be recorded, there is no copy protection information in the signal that is used for determining, "picture formats available for a recording operation," as in Claim 1. The video data of Shah-Nazaroff is only of a specific type of picture resolution format, as selected by a user, not adaptively selected as in Claim 1.

Even if one skilled in the art would find the claimed, "decoded conditional access information comprising data used for determining picture resolution formats available," as in Claim 1, one skilled in the art would have to apply the teachings of the Applicant's invention to modify Bestler with Shah-Nazaroff to arrive at the Applicant's invention. Specifically, one would use the Applicant's invention to modify the copy protection system of Bestler to incorporate the use "decoded conditional access information comprising data used for determining picture resolution formats available," where such information is used for, "adaptively selecting a picture resolution format." Shah-Nazaroff does not suggest or disclose how to do the aforementioned features of Claim 1.

For the arguments listed above, and the discussion with the Examiner during the interview, Claim 1 is believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicant requests that the rejection of Claim 1 be withdrawn. Rejected dependent Claims 2-8, are considered patentable for substantially the same reasons given above for Claim 1. Applicant therefore requests that the rejection of these claims be withdrawn as well.

III. Rejection under 35 U.S.C. § 103(a) of Claim 9

Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Bestler et al., (U.S. Pat. No. 5,680,457), in view of Nagshima et al., (U.S. Pat. No. 6,275,988). The Applicant disagrees with this ground of rejection.

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-8-

As mentioned above, in connection for Claim 1, nothing in Bestler suggests or discloses the claimed feature of decoded conditional access information comprising data used for, "determining picture resolution formats available for," recording video image information and/or reproducing said recorded video image information." Hence, if Bestler does not anticipate features of Claim 1, then Bestler does not anticipate dependent Claim 9, which depends on Claim 1. Similarly, Nagashima does not disclose or suggest the claimed features of Claim 1, which Claim 9 depends on.

For the arguments listed above, Claim 9 is believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicant requests that the rejection of Claim 9 be withdrawn.

IV. Rejection under 35 U.S.C. § 103(a) of Claims 15-17

Claims 15-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kanota et al., (U.S. Pat. No. 5,991,500). The Applicant disagrees with this ground of rejection.

As explained above, in connection for Claims 10-14, the Kanota reference does not disclose or suggest the claimed features of Claim 10 of having copy protection information, "used to determine display formats available for at least one of," recording video image data and/or reproducing recorded video data. Since Claims 15-17 depend on Claim 10, the Kanota reference does not suggest or disclose features to anticipate claimed elements of dependent Claims 15-17.

For the arguments listed above, Claim 15-17 are believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicant requests that the rejection of Claims 15-17 be withdrawn.

V. Rejection under 35 U.S.C. § 103(a) of Claim 18

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-9-

Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kanota et al., (U.S. Pat. No. 5,991,500) in view of Shah-Nazaroff et al., (U.S. Pat. No. 6,157,377) The Applicant disagrees with this ground of rejection.

As explained above, in connection for Claims 10-14, the Kanota reference does not disclose or suggest the claimed features of Claim 10 of having copy protection information, "used to determine display formats available for at least one of," recording video image data and/or reproducing recorded video data. Since Claim 18 depends on Claim 10, the Kanota reference does not suggest or disclose features to anticipate claimed elements of dependent Claim 18. Furthermore, Shah-Nazaroff does not suggest or disclose the claimed features of Claim 10, which Claim 18 depends on.

For the arguments listed above, Claim 18 are believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicant requests that the rejection of Claims 15-17 be withdrawn.

VI. Rejection under 35 U.S.C. § 103(a) of Claims 19-20, and 22-23

Claims 19-20, and 22-23, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knudson et al. (U.S. Pat. No. 6,141,488) in view of Oguro (U.S. Pat. No. 5,907,656). The Applicant disagrees with this ground of rejection.

Amended Claim 19 has claimed features neither suggested nor disclosed, alone or in combination, in Knudson or Oguro. Specifically, Claim 19 has, "copy protection information comprises information for determining the display formats available for recording said video image information." This type of copy protection information is not available in either Knudson or Oguro.

In the Office Action, the Examiner wrote about that Knudson discloses the feature of, "interactive program guides that allow users to access television listings in different display formats," (column 1, lines 18-20). Applicant notes that this feature has nothing to do with, "display formats available for recording," video image information, as claimed in the Applicant's invention. Specifically,

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-10-

Knudson uses the term "display formats" to refer to the organization of grid program listings, (see column 1, lines 20-24). The "display formats" described in Knudson do not effect the "display formats available for recording" as recited in Claim 19.

For the reasons given above, independent Claim 19 is believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicant request that the rejection of Claim 19 be withdrawn. Rejected dependent Claims 20, and 22-23 are considered patentable for substantially the same reasons given above for Claim 19. Applicant therefore requests that the rejection of these claims be withdrawn as well

VII. Rejection under 35 U.S.C. § 103(a) of Claims 24-25, and 29

Claims 24-25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knudson et al. (U.S. Pat. No. 6,141,488) in view of Tsukamoto et al., (U.S. Pat. No. 5,796,828). Furthermore, Claim 29 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Knudson et al. (U.S. Pat. No. 6,141,488) in view of Shah-Nazaroff et al., (U.S. Pat. No. 6,157,377). Applicant disagrees with these rejections.

The Examiner used the Knudson reference, as part of a rejection, to rejection to Claim 19, from which Claims 24-25 and 29 dependent. As explained above, Knudson neither suggests nor discloses the claimed features of Claim 19 of "copy protection information comprises information for determining the display formats available for recording said video image information." Furthermore, neither the Tsukamoto (for Claim 24-25) nor Shah-Nazaroff (for Claim 29), alone or in combination with Knudson, suggest or disclose the claimed features of independent Claim 19. Therefore, if Claim 19 is allowable, the dependent claims are allowable as well.

For the reasons given above, Claim 24-25, and 29 are believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicant requests that the rejection of the claims be withdrawn.

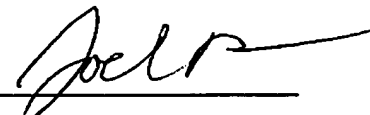
Ser. No. 09/712,539

-11-

PATENT
RCA 89,567 Div

Respectfully submitted,

KARL FRANCIS HORLANDER



By: Joel M. Fogelson

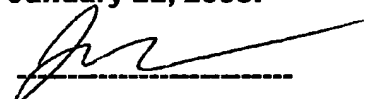
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Tel. (609) 734-6809

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Joel M. Fogelson

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-17-

MARKED UP CLAIMS SET**WHAT IS CLAIMED IS:**

1. (Twice Amended) A method of selecting a format for displaying video
5 image information received in a signal including conditional access information, said
method comprising the steps of:
- a) receiving said signal including video image information and
conditional access information associated with [one of] a plurality of
10 picture resolution formats;
 - b) decoding said conditional access information in said received signal,
wherein said decoded conditional access information comprises data
[relating to] used for determining picture resolution formats available
for at least one of:
 - i) recording said video image information; and
 - 15 ii) reproducing said recorded video image information;
 - c) adaptively selecting a picture resolution format in response to said
decoded conditional access information; and
 - d) processing said video image information using said selected picture
20 resolution format.
2. The method of claim 1, wherein selection of said picture resolution
format is in response to said decoded conditional access information determining
user entitlement to select one of said plurality of available picture resolution formats.
- 25 3. The method of claim 1, wherein said picture resolution format is one of:
- i) a standard definition format; and
 - ii) a high definition format.
4. The method of claim 1, further comprising the step of recording said
30 video image information in said selected picture resolution format on a recording
medium.
5. The method of claim 4, further comprising the step of reproducing said
recorded video image information in said selected picture resolution format on a
35 display.
6. The method of claim 1, wherein said video image information of said
received signal is transmitted as a digital signal on a first channel.

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-18-

7. The method of claim 6, further comprising the step of receiving ancillary data transmitted on a second channel for controlling processing of said video image data.

5 8. The method of claim 7, wherein said ancillary data is transmitted as an analog video signal.

9. The method of claim 1, wherein each of said plurality of picture resolution formats is associated with a respective billing rate and further comprising
10 the step of billing a user at the billing rate associated with a selected one of said plurality of picture resolution formats.

10. (Twice Amended) A method of selecting a format for displaying video image information received in a signal including copy protection information, said
15 method comprising the steps of:

- a) receiving said signal including video image information and copy protection information associated with [one of] a plurality of display formats;
- 20 b) decoding said copy protection information in said received signal, wherein said copy protection information comprises data [relating to] used for determining display formats available for at least one of:
 - i) recording said video image information; and
 - ii) reproducing said recorded video image information;
- 25 c) adaptively selecting a display format for displaying said video image information [on a display] in response to said decoded copy protection information; and
- d) processing said video image information using said selected display format.

30 11. The method of claim 10, wherein selection of said display format is in response to said decoded copy protection information determining user entitlement to select one of said plurality of available display formats.

12. The method of claim 10, wherein said display format is one of:

- 35 i) a standard definition format; and
- ii) a high definition format.

13. The method of claim 10, further comprising the step of recording said video image information in a format determined by said decoded copy protection
40 information on a recording medium.

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-19-

14. The method of claim 13, further comprising the step of reproducing said recorded video image information in said format determined by said decoded copy protection information on a display.

5 15. The method of claim 10, wherein said video image information of said received signal is transmitted as a digital signal on a first channel.

10 16. The method of claim 15, further comprising the step of receiving ancillary data transmitted on a second channel for controlling processing of said video image data.

17. The method of claim 16, wherein said ancillary data is transmitted as an analog video signal.

15 18. The method of claim 10, wherein each of said plurality of display formats is associated with a respective billing rate and further comprising the step of billing a user at the billing rate associated with a selected one of said plurality of display formats.

20 19. (Twice Amended) A method of selecting a format for recording video image information received in a signal including copy protection information, said method comprising the steps of:

- 25 a) receiving said signal including video image information and copy protection information associated with one of a plurality of [recording] display formats;
- b) decoding said copy protection information in said received signal, wherein said copy protection information comprises information for determining the display formats available for recording said video image information;
- 30 c) adaptively selecting a display format for recording said video image information on a recording medium in response to said decoded copy protection information; and
- d) processing said video image information using said selected [recording] display format.
- 35

40 20. (Once Amended) The method of claim 19, wherein selection of said recording format is in response to said decoded copy protection information determining user entitlement to select one of said plurality of available [recording] display formats.

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-20-

21. (Cancelled)

22. (Once Amended) The method of claim 19, further comprising the step of
5 recording said processed video image information in said selected [recording] display
format on a recording medium.

23. (Once Amended) The method of claim 22, further comprising the step of
10 reproducing said recorded video image information in said selected [recording]
display format for use on a display.

24. The method of claim 19, wherein said copy protection information
further includes information indicating a time period during which said processed
15 video image information is able to be reproduced.

25. (Once Amended) The method of claim 24, wherein said time period is
set in response to said decoded copy protection information determining user
entitlement to select one of said plurality of available [recording] display formats.

20 26. (Cancelled)

27. (Cancelled)

25 28. (Cancelled)

29. (Once Amended) The method of claim 19, wherein each of said plurality
of [recording] display formats is associated with a respective billing rate and further
comprising the step of billing a user at the billing rate associated with a selected one
of said plurality of [recording] display formats.

30. (New Claim) A method of selecting a format for recording video image
information received in a signal including copy protection information, said method
comprising the steps of:

- 35 a) receiving said signal including video image information and copy
protection information associated with a plurality of picture resolution
formats;
b) decoding said copy protection information in said received signal,
wherein said copy protection information comprises information for

Ser. No. 09/712,539

PATENT
RCA 89,567 Div

-21-

determining the picture resolution formats available for recording said video image information;

- 5 c) adaptively selecting a picture resolution format for recording said video image information on a recording medium in response to said decoded copy protection information; and
d) processing said video image information using said selected picture resolution format.

10 31. (New Claim) The method of claim 30, wherein selection of said resolution format is in response to said decoded copy protection information determining user entitlement to select one of said plurality of available picture resolution formats.

15 32. (New Claim) The method of claim 30, further comprising the step of recording said processed video image information in said selected picture resolution format on a recording medium.

20 33. (New Claim) The method of claim 32, further comprising the step of reproducing said recorded video image information in said selected picture resolution format for use on a display.

25 34. (New Claim) The method of claim 30, wherein said copy protection information further includes information indicating a time period during which said processed video image information is able to be reproduced.

30 35. (New Claim) The method of claim 30, wherein said time period is set in response to said decoded copy protection information determining user entitlement to select one of said plurality of available picture resolution formats.

35 36. (New Claim) The method of claim 30, wherein each of said plurality of picture resolution formats is associated with a respective billing rate and further comprising the step of billing a user at the billing rate associated with a selected one of said plurality of picture resolution formats.